

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

Amendments to the Claims

1. (currently amended) A method for dispensing a use solution from a solid detergent into a washing machine, comprising the steps of:
 - a. placing a solid detergent having a bottom in a dispenser, the dispenser having a chamber, the chamber defining a cavity and including a water inlet and a water outlet, and the cavity being configured and arranged to receive the solid detergent;
 - b. supplying water to the water inlet of the dispenser, wherein the water is supplied to a level within the cavity of the chamber thereby having contact with the solid detergent;
 - c. flooding the ~~solid detergent cavity~~ with water from the bottom of the solid detergent;
 - d. dissolving ~~an amount~~ a relatively small portion of the solid detergent in the water and forming a use solution, the solid detergent being dispensed completely over more than one flooding of water within the cavity; and
 - e. releasing the use solution from the dispenser via the water outlet, wherein the use solution flows out of the chamber through the water outlet and into the washing machine.
2. (original) The method for dispensing a use solution from a solid detergent into a washing machine of claim 1, wherein the level of water within the cavity of the chamber is approximately 1/4 inch to 3 inches.
3. (original) The method for dispensing a use solution from a solid detergent into a washing machine of claim 1, wherein the water has a temperature of approximately 80 to 180 °F.
4. (original) The method for dispensing a use solution from a solid detergent into a washing machine of claim 1, wherein the water outlet is always open and the water flows into the water inlet at approximately 0.1 gallon to 2 gallons per minute and the water flows out of the water outlet at approximately 0.1 to 1 gallon per minute.

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

5. (original) The method for dispensing a use solution from a solid detergent into a washing machine of claim 1, wherein the use solution from the solid detergent is dispensed into the washing machine having a concentration of 0.1% to 1.5% weight to weight.
6. (original) The method for dispensing a use solution from a solid detergent into a washing machine of claim 1, wherein uniform dissolution of the solid detergent occurs, thereby maintaining a relatively constant concentration and a relatively constant shape of the solid detergent.
7. (currently amended) A detergent dispenser, comprising:
 - a. a solid detergent having a bottom;
 - b. a water source providing water to the detergent dispenser; and
 - c. a chamber defining a cavity configured and arranged to receive the solid detergent and the water, said chamber including a water inlet and a water outlet, the water inlet being configured and arranged to receive the water from the water source, wherein the water flows into the cavity, floods the solid detergent from the bottom of the solid detergent and dissolves a portion of the solid detergent to form a use solution, the solid detergent being dispensed completely over more than one flooding of water within the cavity, and wherein the water outlet is configured and arranged to dispense substantially all of the use solution out of the chamber when the detergent dispenser is not in use.
8. (original) The detergent dispenser of claim 7, further comprising a level of water within the cavity of the chamber, wherein the level of water is approximately ¼ inch to 3 inches.
9. (original) The detergent dispenser of claim 7, wherein the water has a temperature of approximately 80 to 180 °F.
10. (original) The detergent dispenser of claim 7, wherein the water outlet is always open and the water flows into the water inlet at approximately 0.1 gallon to 2 gallons per minute and the water flows out of the water outlet at approximately 0.1 to 1 gallon per minute.

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

11. (original) The detergent dispenser of claim 7, wherein the use solution from the solid detergent is dispensed into the washing machine having a concentration of 0.1% to 1.5% weight to weight.
12. (original) The detergent dispenser of claim 7, wherein uniform dissolution of the solid detergent occurs, thereby maintaining a relatively constant concentration and a relatively constant shape of the solid detergent.
13. (currently amended) A dispenser for dispensing a use solution from a solid detergent into a washing machine, comprising:
 - a. a solid detergent;
 - b. a water source providing water to the dispenser;
 - c. a chamber including a front portion, a first side portion, a second side portion, a back portion, a bottom portion, a top portion, and an opening, the chamber defining a cavity configured and arranged to receive the solid detergent and the water, the back portion of the chamber further comprising a water inlet proximate the top portion and a water outlet proximate the bottom portion, the water inlet being configured and arranged to receive the water from the water source, whereby the water flows into the cavity from the bottom of the chamber where it contacts the solid detergent and dissolves a portion of the solid detergent to form a use solution, the solid detergent being dispensed completely over more than one flooding of water within the cavity, and whereby the water outlet is configured and arranged to dispense substantially all of the water and the use solution out of the chamber and into the washing machine when the dispenser is not in use;
 - d. an air gap proximate the water inlet to prevent the water from returning to the water source;
 - e. a tunnel proximate the back portion and the second side portion, wherein the water travels from the water inlet, through the tunnel, and into the bottom portion of the chamber;

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

- f. a level of the water within the cavity of the chamber contacting the solid detergent, wherein uniform dissolution of the solid detergent occurs thereby maintaining a relatively constant concentration and a relatively constant shape of the solid detergent; and
 - g. a lid connected to the top portion of the chamber, whereby the lid covers the opening of the chamber into the cavity.
- 14. (original) The dispenser for dispensing a use solution from a solid detergent into a washing machine of claim 13, wherein the level of water within the cavity of the chamber is approximately $\frac{1}{4}$ inch to 3 inches.
- 15. (original) The dispenser for dispensing a use solution from a solid detergent into a washing machine of claim 13, wherein the water has a temperature of approximately 80 to 180 °F.
- 16. (original) The dispenser for dispensing a use solution from a solid detergent into a washing machine of claim 13, wherein the water outlet is always open and the water flows into the water inlet at approximately 0.1 to 2 gallons per minute and the water flows out of the water outlet at approximately 0.1 to 1 gallon per minute.
- 17. (original) The dispenser for dispensing a use solution from a solid detergent into a washing machine of claim 13, wherein the use solution from the solid detergent is dispensed into the washing machine having a concentration of 0.1% to 1.5% weight to weight.
- 18. (original) The dispenser for dispensing a use solution from the solid detergent into a washing machine of claim 13, further comprising a tab extending from and operatively connected to said front portion of said chamber and an opening in said lid, wherein said tab extends through said opening when said solid detergent should be added to said dispenser.
- 19. (currently amended) A method for dispensing detergent, comprising the steps of:

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

- a. placing a detergent with a particular composition into a dispenser having a cavity, a water inlet, and a water outlet, said cavity being configured and arranged to receive and support said detergent;
 - b. supplying water to said water inlet and using a valve to control the amount of water flowing into said water inlet;
 - c. flooding said dispenser with water to a level within said cavity wherein said water contacts said detergent and dissolves a portion of said detergent to form a use solution, the detergent being dispensed completely over more than one flooding of water within the cavity; and
 - d. releasing said use solution through said water outlet, thereby dispensing a particular concentration of said use solution, wherein said water outlet is always open, and wherein water is supplied to said water inlet at a rate faster than water is released through said water outlet, thereby allowing the water to contact the detergent and dissolve a portion of said detergent to form said use solution.
20. (currently amended) A dispenser for dispensing a use solution from a solid detergent into a washing machine, comprising:
- a. a solid detergent having a bottom;
 - b. a dispenser including a cavity, a water inlet, and a water outlet, wherein said cavity is configured and arranged to receive and support said solid detergent;
 - c. a conduit connecting said water inlet to a water source;
 - d. a valve operatively connected to said conduit controlling the flow of water from said water source into said water inlet, wherein said cavity is flooded with water to a level within said cavity, wherein water contacts said solid detergent from the bottom of said solid detergent and a uniform dissolution of said solid detergent occurs thereby maintaining a relatively constant concentration and a relatively constant shape of the solid detergent, and wherein a use solution is formed, the solid detergent being dispensed completely over more than one flooding of water within the cavity; and

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

- e. a hose member connecting said water outlet to a washing machine, wherein substantially all of said use solution is dispensed out of said cavity through said water outlet and into the washing machine via said hose member.
21. (currently amended) A detergent dispenser for use with a washing machine, comprising:
- a. a dispenser having a chamber including a cavity, a water inlet and a water outlet;
 - b. a solid detergent;
 - ~~b. c.~~ a conduit connecting said water inlet to a water source;
 - ~~e. d.~~ a valve operatively connected to said conduit, wherein said valve controls the amount of water flowing from said water source into said water inlet;
 - ~~d. e.~~ a hose member operatively connected to said water outlet and having a curvature, wherein said curvature extends in an upward direction at a height greater than said water outlet and then extends downward below said water outlet;
 - ~~e. f.~~ a first level of water within said cavity controlled by said valve to reach a height below said curvature, wherein said first level of water remains in said cavity and does not flow out of said water outlet; and
 - ~~f. g.~~ a second level of water within said cavity controlled by said valve to reach a height greater than said curvature, wherein a siphoning effect occurs and substantially all of the water flows out of said dispenser via said water outlet, said solid detergent being dispensed completely over more than one flooding of water within said cavity.
22. (currently amended) A method of dispensing a use solution from a solid detergent into a washing machine, comprising the steps of:
- a. placing a solid detergent inside a dispenser having a cavity, a water inlet, a water outlet, and a hose member operatively connected to said water outlet, said hose member having a curvature, wherein said curvature extends in an upward direction at a height greater than said water outlet and then extends downward below said water outlet;

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

- b. supplying water to said water inlet, wherein water flows from said water inlet into said cavity;
 - c. controlling the amount of water flowing into said water inlet with a valve;
 - d. flooding said cavity with water to a first level, wherein said first level of water contacts said solid detergent contained within said dispenser to form a use solution; and
 - e. flooding said cavity with water to a second level, wherein said second level of water initiates the flow of substantially all of said use solution out of said water outlet into a washing machine, the solid detergent being dispensed completely over more than one flooding of water within the cavity.
23. (new) The method for dispensing a use solution from a solid detergent into a washing machine of claim 1, further comprising flooding said cavity with water to a first level, wherein said first level of water contacts said solid detergent contained within said cavity to form a use solution, said solid detergent being dispensed completely over more than one flooding of water within said cavity, and flooding said cavity with water to a second level, wherein said second level of water initiates the flow of substantially all of said use solution out of said water outlet into a washing machine.
24. (new) The detergent dispenser of claim 7, further comprising:
- a. a hose member operatively connected to said water outlet and having a curvature, wherein said curvature extends in an upward direction at a height greater than said water outlet and then extends downward below said water outlet;
 - b. a first level of water within said cavity at a height below said curvature, wherein said first level of water remains in said cavity and does not flow out of said water outlet; and
 - c. a second level of water within said cavity at a height greater than said curvature, wherein a siphoning effect occurs and substantially all of the water flows out of said cavity via said water outlet.

USSN: 09/550,428
Group Art Unit: 1744
Docket No.: 117P29US01

25. (new) The dispenser for dispensing a use solution from a solid detergent into a washing machine of claim 13, further comprising:
- a. a hose member operatively connected to said water outlet and having a curvature, wherein said curvature extends in an upward direction at a height greater than said water outlet and then extends downward below said water outlet;
 - b. a first level of water within said cavity at a height below said curvature, wherein said first level of water remains in said cavity and does not flow out of said water outlet; and
 - c. a second level of water within said cavity at a height greater than said curvature, wherein a siphoning effect occurs and substantially all of the water flows out of said cavity via said water outlet.
26. (new) The method for dispensing detergent of claim 19, further comprising flooding said cavity with water to a first level, wherein said first level of water contacts said detergent contained within said cavity to form a use solution, said detergent being dispensed completely over more than one flooding of water within said cavity, and flooding said cavity with water to a second level, wherein said second level of water initiates the flow of substantially all of said use solution out of said water outlet into a washing machine.
27. (new) The dispenser for dispensing a use solution from a solid detergent into a washing machine of claim 20, further comprising:
- a. a curvature of said hose member, said curvature extending in an upward direction at a height greater than said water outlet and then extending downward below said water outlet;
 - b. a first level of water within said cavity at a height below said curvature, said first level of water remaining in said cavity and not flowing out of said water outlet; and
 - c. a second level of water within said cavity at a height greater than said curvature, wherein a siphoning effect occurs and substantially all of the water flows out of said cavity via said water outlet.